

Title (en)
METHOD FOR SEPARATING AND PURIFYING AN AQUEOUS MIXTURE THAT MAINLY CONSISTS OF ACETIC ACID AND FORMIC ACID

Title (de)
VERFAHREN ZUR TRENNUNG UND REINIGUNG EINES WÄSSRIGEN GEMISCHES AUS DEN HAUPTKOMPONENTEN ESSIGSÄURE UND AMEISENSÄURE

Title (fr)
PROCEDE DE SEPARATION ET DE PURIFICATION D'UN MELANGE AQUEUX CONSTITUE PRINCIPALEMENT D'ACIDE ACETIQUE ET D'ACIDE FORMIQUE

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Abstract (en)
[origin: US6793777B1] The invention relates to a method for separating and purifying an aqueous mixture that mainly consists of acetic acid, formic acid and high-boiling substances by extraction with a solvent in a cyclic process. The inventive method is characterized in that the flow of raffinate is fed to a solvent stripping column (11) with the major part of the water in order to remove the water from the cycle. The flow of extract is fed to a solvent recovery distillation column (8). In a first step, a mixture (A) that consists of water and solvent, is separated by overhead distillation. A mixture (B) that consists of acetic acid, formic acid and high-boiling substances is separated via a sump. Once the formic acid is removed in a column (29), mixture (B) is separated in an acetic acid distillation column to give pure acetic acid and high-boiling substances. Mixture (A) is fed to a phase separator and the aqueous phase is returned to the solvent stripping column (11) together with any residual portions of the solvent while the organic phase is returned to the extractor (8).

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